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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/496,183	02/02/2000	Junichi Hikita	P3213-9038	5846

7590 05/21/2002

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EXAMINER

CRUZ, LOURDES C

ART UNIT	PAPER NUMBER
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2827

DATE MAILED: 05/21/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/496,183

Applicant(s)

HIKITA ET AL.

Examiner

Lourdes C. Cruz

Art Unit

2827

MC

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 8-11 is/are pending in the application.
- 4a) Of the above claim(s) 8 and 9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 10-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claims 8-9 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☒ All b) ☐ Some * c) ☐ None of the CERTIFIED copies of the priority documents have been:
1. ☒ received.
2. ☐ received in Application No. (Series Code / Serial Number) _____.
3. ☐ received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter that the applicant regards as his invention.

Claims 1-5 and 10-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The phrase "the other" lacks antecedent basis in the claim. See that applicant defines at "least one pair of opposite sides". Therefore, by using "the other" of the opposite sides, Applicant has rendered the claim indefinite because it is unclear if another pair is being defined, if it refers to only one side. Since the amendment to the claims has rendered the claims indefinite, the examiner has examined them as best understood.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) The invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1-5 and 10-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Wenzel et al. (U.S. Patent No. 6150724).

Regarding claims 1, 3, and 4 Wenzel discloses (See Figs. 5,7, and 18) a semiconductor device comprising a first semiconductor chip 102 and a second semiconductor chip 104 superposed on and bonded to a surface of the first semiconductor chip, wherein in a region on the surface of the first semiconductor chip where the second semiconductor chip is bonded to the first semiconductor chip, chip connection portions (corresponding to 108) are arranged in standardized positions so as to fit a plurality of predetermined types of semiconductor chips; and wherein on the second semiconductor chip, chip connection portions are arranged in standardized positions so as to fit the chip connection portions arranged on the first semiconductor chip; wherein at least part of the chip connection portions arranged on the first semiconductor chip are common to the plurality of predetermined types of chips so as to be used for input /output signals.

See that the prior art recites all the structural limitation above. The claim as amended, however, recites an intended use in conjunction with other structural limitations. Such limitations include, for example, the recitation of "input/output signals having identical specifications". This quoted intended use limitation does not distinguish the claimed invention from that disclosed by the prior art since the device of the prior art could be used with predetermined types of chips so as to be used for input/output signals having identical specifications.

Regarding claims 2 and 5 Wenzel discloses semiconductor chips with identical functions but of different grades in as much as any specific function is claimed.

Wenzel also teaches a chip connection region wherein chip connection portions (corresponding to 108) are formed in standardized portions so as to fit any of the plurality of predetermined types of semiconductor chips, and the chip connecting portions are arranged:

- Along an edge (left corner) of the chip connection region (Claim **10**)
- Along an edge and in an inner portion of the chip connection region (Claim **11**)
- Along an edge of the chip connection region, which is rectangular in shape, and also along opposite sides of the chip connection region (Claim **12**)

Response to Arguments

Applicant has failed to provide arguments against the last office action. Instead, Applicant limited his/her arguments to the allowability of the claims as amended. However, due to the indefiniteness of the amendment and the 112 problems raised by it, the rejection as mailed December –2001 is still applicable to the claims as best understood by the examiner. Find rejection above.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

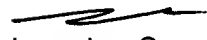
mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

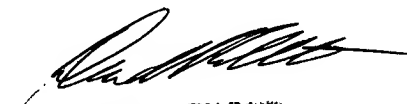
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lourdes C. Cruz whose telephone number is 707-306-5691. The examiner can normally be reached on M-F 8:00- 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David L. Talbott can be reached on 703-305-9883. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

Lourdes C. Cruz
Examiner
Art Unit 2827


Lourdes Cruz
May 18, 2002


DAVID L. TALBOTT
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800